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Supplemental Material

Air Pollution and Lung Function in Dutch Children: A Comparison of Exposure Estimates and Associations Based on Land Use Regression and Dispersion Exposure Modeling Approaches

Meng Wang, Ulrike Gehring, Gerard Hoek, Menno Keuken, Sander Jonkers, Rob Beelen,
Marloes Eeftens, Dirkje S. Postma, and Bert Brunekreef

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Table S1. LUR model structures and performances [leave-out-out-cross-validation (LOOCV) R^2 and root mean square error (RMSE)] used in this study.

Pollutants	LOOCV R^2^a	RMSE^b	Predictor variables in LUR models
NO ₂	0.81	5.1	Regional background NO ₂ , population density in 5000m buffer, traffic load in 50m buffer, road length in 1000m buffer, heavy traffic load in 25m and 25 to 500m buffer, inverse distance to the nearest road.
PM _{2.5}	0.61	1.2	Regional background PM _{2.5} , major road length in 50m buffer, traffic load at major road in 1000m buffer.
PM _{2.5} soot	0.89	0.2	Traffic load in 500m buffer, major road length in 50m buffer, regional background PM _{2.5} soot, high and low residence density in 5000m buffer, heavy traffic load in 50m buffer.
PM ₁₀	0.60	2.3	Traffic load at major road in 500m buffer, population density in 5000m buffer, major road length in 50m buffer.

^aLOOCV R^2 : leave-one-out-cross-validation R^2 . ^bRMSE: root mean squared error from leave-one-out-cross-validation.